Course Title: Introduction to Environmental Science

Course #: EVS 100

Course Item #: 2114

Semester: Summer 2014 (May 27 to Aug. 6, 2014)  Semester Hours: 3.0

Class Meeting Times—Day/Time: Online

Instructor: Mr. Paul Maywood

Instructor’s Contact Information: Course message or pmaywood@mcc.commnet.edu maywoodpas@ccsu.edu (alternate - use this only if there are issues with commnet)

VERY IMPORTANT: If you are using commnet to email me for help or information please use the following format in your subject line:

EVS 100 [your name] HELP

Online Office Hours: Sunday and Wednesday 7-8:00 pm. During this time I will be available for online chat. The instructor will be available for chat at other times by appointment.

Phone Contact: (860) 262-4883 (leave message). Email will get you a faster response. I will generally be able to respond to email requests within 12-24 hours.

Course Prerequisites: None

Scope of Course: EVS*100, Introduction to Environmental Science, CRN 2070. The study of the effects of humans on the Earth’s natural systems. Three hours lecture per week. As an introduction to environmental studies, students are helped to develop understanding of the pattern and process in the Earth’s systems, the various ways in which environmental issues have developed and been perceived, and the nature of the interactions between people and Earth systems. This unit should benefit anyone interested in global environmental issues, and provides a background for upper level units in environmental studies.


Also Required: calculator, appropriate field clothing for optional field trips.
Evaluation Criteria (Grading):

The following factors will make up your grade:
1. 35% exams
2. 15% quizzes
3. 30% homework
4. 20% discussions

Grading Scale:
- A 93-100
- B 83-86.9
- C 73-76.9
- D 63-66.9
- A- 90-92.9
- B- 80-82.9
- C- 70-72.9
- D- 60-62.9
- B+ 87-89.9
- C+ 77-79.9
- D+ 67-69.9
- F <60

Grades for each assignment will be posted in Blackboard Learn and students will be provided with running course averages. It is the responsibility of the student to inform the instructor of any discrepancy as soon as possible. You should also know how to calculate your own course average at any time. Final grades are not rounded.

Course Components

Announcements: This tool will be used to communicate any change or important information about assignments, any change in schedule, or to tell you about upcoming field trips, special events of interest, or exam details.

Exams: Three timed exams will be given throughout the semester. These exams are objective exams with emphasis on concepts and applications and may be accessed from the Learning Modules. Exams must be completed by the specified deadline. Questions may be true/false, multiple choice, multiple multiple choice, fill-in-the-blank, matching, short answer, essay and/or critical thinking. Questions will be made up from quiz questions, lecture notes, the text, outside readings, and/or homework assignments. The lowest exam score will NOT be dropped. After the exam, answers and grades will be released; therefore, missed exams cannot be made up. In addition, no extensions will be permitted. Answers submitted via email will not be accepted. Some questions from the subject matter covered by a prior exam may appear on future exam(s). The Final Exam is not cumulative and will carry the same weight as prior exams.

Quizzes: Thirteen timed quizzes will be given. Quizzes must be taken by the specified late Sunday night deadline. Questions may be true/false, multiple choice, multiple multiple choice, fill-in-the-blank, matching, short answer, essay and/or critical thinking. Questions will be generated from the text, outside readings, and/or homework assignments and may be accessed from the Learning Modules. The lowest quiz score will NOT be dropped. After the quiz, answers and grades will be released; therefore, missed exams cannot be made up. In addition, no extensions will be permitted. Answers submitted via email will not be accepted. Missed quizzes cannot be made up.

Homework (Assignments): Five homework assignments will be given. Assignments must be submitted by the specified late night deadline (Sunday) and may be accessed from the Learning Modules. Missed homework assignments cannot be made up and you will receive a zero for any outstanding work. NOTE: Attachments will not be accepted nor are submissions accepted via email. You need to copy/paste your answers into the
submission box. Only partial credit will be given if you submit your assignment in the "Comments" box.

Discussions: Five discussions will be assigned and may be accessed from the discussions button on the left-hand toolbar or from the Learning Modules. Your discussion/reply must be submitted by the specified late night deadline. Students are to provide substantive feedback on discussion topics. This will be evaluated based on relevance, readability and/or complete sentences and number of words. Discussions will need to be a minimum of 250 words (unless otherwise directed) and replies to others’ posts will need to reach a 150-word minimum. One discussion and one response will need to be submitted for each topic, except Discussion 1 which will be one discussion only. For each discussion grade, 70% will be based upon the discussion post and 30% upon the reply per the following rubric:

Part I. Points for Answers to the Questions (7 Points)

<table>
<thead>
<tr>
<th>Discussion Grading Rubric</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provided complete details &amp; explanations in an organized manner using complete sentences for the Discussion Question addressed in the discussion assignment.</td>
<td>7</td>
</tr>
<tr>
<td>Provided details &amp; explanations in an organized manner using complete sentences for the Discussion Question.</td>
<td>5</td>
</tr>
<tr>
<td>Details &amp; explanations were very limited but writing was organized for some of the discussion question.</td>
<td>3</td>
</tr>
<tr>
<td>Details &amp; explanations were very limited with no organization.</td>
<td>1</td>
</tr>
</tbody>
</table>

Part II. Points for Responses to Others (3 points)

3 Points: Responded to at least one message with explanations.
1 Point: Responded to at least one message without explanations.
0 Points: Does not respond to any one.

Chat: To access your instructor during office hours, simply go to the 'Chat' area and click on 'Office Hours'. You must have the updated version of Java to chat. Office Hours will be held during the hours posted above unless announced otherwise.

Field Trips: **Field trips are optional.** Weather permitting, one or possibly more field trips may be offered. A short report or question/answer sheet will be required if you wish to get extra credit for this activity. Dates and times will be provided in the Announcements tool. The following have been previous destinations:

- Newgate Prison State Park
- Millstone Nuclear Power Plant
- St. Mary’s Cemetery, Middletown
- Connecticut River, Haddam Meadows State Park
- CRRA Trash Museum, Hartford
**Course Schedule and Text Readings:** This course schedule is a best estimate and deviations may occur due to unforeseen circumstances.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5/27-6/1</td>
<td>Introduction, Critical Thinking Methods of Science and the Titanic</td>
<td>Other</td>
<td>Purchase text Discussion 1: Introduction</td>
</tr>
<tr>
<td></td>
<td>6/1/14</td>
<td>Science and Sustainability Earth's Physical Systems</td>
<td>Readings,</td>
<td>Assignment 1: Ecological Footprint</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chap. 1</td>
<td>Chap 1 Quiz (Ch. 1, Scientific Method)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chap. 2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>6/2-6/8</td>
<td>Evolution, Biodiversity and Population Ecology</td>
<td>Chap. 3</td>
<td>Discussion 2: Biodiversity Chap 2 Quiz</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Species Interactions and Community Ecology</td>
<td>Chap. 4</td>
<td>Chap 3 Quiz</td>
</tr>
<tr>
<td>3</td>
<td>6/9-6/15</td>
<td>Environmental Systems and Ecosystem Ecology</td>
<td>Chap. 5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ethics, Economics, and Sustainable Development</td>
<td>Chap. 6</td>
<td>Chap 4 Quiz</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chap 5 Quiz</td>
</tr>
<tr>
<td>4</td>
<td>6/16-6/22</td>
<td>Human Population</td>
<td>Chap. 8</td>
<td>Assignment 2: Soil Texture Midterm Exam 1 (Intro, Chaps 1-6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Soil and Agriculture</td>
<td>Chap. 9</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>6/23-6/29</td>
<td>Agriculture, Biotechnology, and the Future of Food Forests, Forest</td>
<td>Chap. 10</td>
<td>Discussion 3: GMOs and Food Chap 9 Quiz</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management, and Protected Areas</td>
<td>Chap. 12</td>
<td>Chap 10 Quiz</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Possible Field Trip 6/28 or 6/29</td>
</tr>
<tr>
<td>6</td>
<td>6/30-7/6</td>
<td>The Urban Environment</td>
<td>Chap. 13</td>
<td>Assignment 3: Acid Rain Midterm Exam 2 (Chaps 8-16)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marine and Coastal Systems and Resources</td>
<td>Chap. 16</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7/7-7/13</td>
<td>Atmospheric Science and Air Pollution</td>
<td>Chap. 17</td>
<td>Assignment 4: Climate Change Assignment 4: The Ultimate Climate Change</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Global Climate Change</td>
<td>Chap. 18</td>
<td>Chap 18 Quiz</td>
</tr>
<tr>
<td>8</td>
<td>7/14-7/20</td>
<td>Fossil Fuels, Their Impacts, and Energy Conservation</td>
<td>Chap. 19</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Last day to withdraw</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chap. 21</td>
<td>Chap 20 Quiz</td>
</tr>
<tr>
<td>10</td>
<td>7/28-8/3</td>
<td>Managing Our Waste Minerals and Mining</td>
<td>Chap. 22</td>
<td>Discussion 5: Fracking Assignment 5: Mining in Connecticut Possible Field</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chap. 23</td>
<td>Trip this week or next</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>8/4-8/10</td>
<td>Review and take Final Exam</td>
<td></td>
<td>Final Exam (Ch. 17-23)</td>
</tr>
</tbody>
</table>

**NOTE:** The above schedule is subject to change.
Success in this course will require:

**Strong discipline and a desire to succeed.** You will need to log in to Blackboard often (typically, at least several times per week, motivating yourself to meet the requirements for success. Being able to navigate in Blackboard will be critical.

**Ability to work well independently.** You'll develop the support of your fellow students all taking the same course together, but it will be different than a typical classroom environment. If you work well independently, your chance of success is higher.

**Computer Savvy.** If you're not familiar with the internet and email communication, we recommend that you take a computer enrichment class prior to enrolling in this course. Faculty assume you know how to access and send data on the internet.

Course Requirements and Online Learning

Each student will be required to read and study all text and lecture materials each week. There may be additional materials to enhance understanding of each area covered for the student to complete each week.

Rules for online dialogue:
1) Always be polite.
2) Try to make positive comments, even if you do not fully agree with the instructor or other students.
3) Do not give out any personal data. You may email Mr. Maywood or other students through the Vista site. Therefore, there is no need to give out your personal email address to any other student.
4) Access the Vista course site at least 2 to 3 times a week. There is a significant amount of reading, homework assignments and assessments during the semester.

Learning Outcomes

Generally, the student should become familiar with the following:

1) Define and describe some of the basic principles and fundamental concepts of the planet Earth in the context of its environment and our human impact.
2) Discuss the historical development of some of the principles and theories in understanding our environment and our impact on it.
3) Discuss and use some of the various methods and apparatus used in observing and measuring various physical and chemical phenomena of our environment.
4) Apply analytical and problem-solving techniques to homework exercises, including the use of software for purposes of observation and data retrieval.

Primary Course Goals:

1) Encourage a sense of awe and an appreciation of the topics investigated in environmental science.
2) Facilitate student understanding of the scientific method and provide opportunities for their practice in its use.
3) Develop critical thinking and reasoning skills—emphasis on the predicting/testing nature of science.
Secondary Course Goals:

1) Provide students with a moderately comprehensive introduction to topics and results in environmental science.
2) Provide students with opportunities to learn, and use, quantitative reasoning skills.

How this course addresses MxCC Core Competencies:

1) Communication Skills: Students are encouraged to apply verbal communication skills in discussing problems and questions with instructors and fellow students. Written communication skills will be exercised in completing homework and classroom assignments.
2) Conceptual/Critical Thinking Skills: Critical thinking skills will be defined and discussed with each lesson. In addition, students will be utilizing critical thinking skills in their homework.
3) Technological Literacy: Students will be required to search various websites, compile information to answer questions and document their work.
4) Information Literacy: Information literacy skills will be utilized as noted in point 3—Technological Literacy.
5) Quantitative Reasoning: The student will learn to appreciate some of the large and small scale phenomena associated with Earth systems. This will be limited to simple calculations and processes outlined in lectures.
6) Understanding of Diversity: Great discoveries in the natural world have been made by persons of all ethnicity, race, culture, religion and natural origin. Discussions will note this diversity.
7) Values, Ethics and Responsible Citizenship: Where applicable, the course will make note of ethics and legal responsibilities of scientists. Students will also be apprised of the social responsibilities that scientists take on, particularly environmentalists.
8) Aesthetic Perspective: Students will be able to appreciate the symmetry and beauty of nature and how the scientific method is used to help understand our environment in a rational sense.

Policies

Makeups: As stated previously, there are no makeup dates for quizzes or exams. Exceptions MAY be made for emergencies when the instructor is notified IN ADVANCE.

Grading: The College uses the following grades and quality points:

A   = 4.0  B   = 3.0  C   = 2.0  D   = 1.0
A-  = 3.7  B-  = 2.7  C-  = 1.7  D-  = 0.7
B+  = 3.3  C+  = 2.3  D+  = 1.3  F   = 0.0

The following have no quality points:

W (Withdrawal)  I (Incomplete)  AU (Audit)
U (Fail)   N (No Basis for Grade)  S (Pass)

Withdrawal: See the MxCC catalog for the College’s policy on withdrawal dates, without penalty. The last day to withdraw is Friday, July 18, after which only withdrawal will be permitted in only extreme cases with full documentation.
Class Expectations: Science includes good communication skills (listening, speaking and writing). Professional courtesy and respect is expected from all participants of the class. It is also important to be safe, courteous and watch out for each other during field trips.

Students with Disabilities: Students with physical or learning disabilities who may require accommodations are encouraged to contact the Counseling Office. After disclosing the nature of the disability, students are urged to discuss their needs with individual instructors. This should be done at the beginning of each semester. Instructors, in conjunction with appropriate college officials, will provide assistance and/or accommodations only to those students who have completed this process.

Plagiarism and Academic Honesty: At Middlesex Community College we expect the highest standards of academic honesty. Academic dishonesty is prohibited in accordance with the Board of Trustees’ Proscribed Conduct Policy in Section 5.2.1 of the Board of Trustees’ Policy Manual. This policy prohibits cheating on examinations, unauthorized collaboration on assignments, unauthorized access to examinations or course materials, plagiarism, and other proscribed activities. Plagiarism is defined as the use of another’s idea(s) or phrase(s) and representing that/those idea(s) as your own, either intentionally or unintentionally. If the instructor determines that a student has committed plagiarism, the student will, at minimum, receive a zero for the assignment. Additional sanction may be administered, including but not limited to: transcript notation, reduction in grade or failure of the course, and/or dismissal from the college on a temporary or permanent basis.

Procedure for Requesting the Accommodation of Religious Beliefs and Practices: If your religious obligations conflict with the course calendar requirements, and if you wish to request an accommodation, you must make your request in writing prior to the date of the assessment or activity you will miss, and preferably at the beginning of the semester. When requesting a make-up quiz, test, exam, assignment, or activity, state the reason for your request and the date(s) on which your religious obligation(s) will conflict with the course calendar requirements. Also, if your religious obligation/holiday is unfamiliar to your instructor, you may be asked to provide a calendar, which shows the published date(s) of your religious observance(s) or holiday(s).

Inclement Weather: In the event of inclement weather either before the start of a day when classes are in session or during the school day, you may check for information on delayed openings, college closings, class cancellations, etc by listening to the radio and television stations listed below. Additionally, a message will be posted on the MxCC website at www.mxcc.commnet.edu and an announcement made on the college’s main phone number, (860) 343-5800. (When calling the main phone number, be sure to choose option 1 from the menu for school closings.) If classes are already in session, everyone on campus will be notified of any changes. Decisions to cancel classes or close the college early will be made as soon as practicable.

<table>
<thead>
<tr>
<th>Radio Stations</th>
<th>Television Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMRD 1150 AM</td>
<td>WFSB - 3</td>
</tr>
<tr>
<td>WDRC 102.9 FM and 1360 AM</td>
<td>WTNH - 8</td>
</tr>
<tr>
<td>WMMW 1470 AM</td>
<td>WVIT - 30</td>
</tr>
<tr>
<td>WRCH 100.5 FM</td>
<td></td>
</tr>
<tr>
<td>WTIC 1080 AM, 96.5 FM</td>
<td></td>
</tr>
<tr>
<td>WZMX 93.7 FM</td>
<td></td>
</tr>
<tr>
<td>WELI 960 AM, WKCI 101 FM</td>
<td></td>
</tr>
</tbody>
</table>

Off Campus Sites:
The MxCC Meriden Center will comply with the Middletown campus policy. Exception: In the event of extreme weather only in the Meriden area and the Middletown campus determines to hold classes, the decision to cancel classes at the Meriden Center will be determined by the MxCC Meriden Center Director and the Dean of Finance & Administration.

The Old Saybrook off campus site will comply with the Middletown campus policy. Exception: In the event of extreme weather only at the off campus site, the decision to hold or cancel classes at this
extension center will be made by our campus extension program director. Faculty should call the Continuing Education Office at (860) 343-5865.

Note: Off campus sites are ultimately subject to the cancellation policy of the school in which MxCC holds classes.

NOTE: Your textbook should look like one of the above. Make sure you read it!